SUBJECT:	Fermilab Assessment Manual – Chapter 4 Independent Assessment Procedure – Form 1	Number:	3902.1004 FORM 1
RESPONSIBILITY:	Quality Assurance Manager	REVISION:	000 C1
APPROVED BY:	Head, Office of Quality and Best Practices	EFFECTIVE:	

### FERMILAB INDEPENDENT ASSESSMENT REPORT FORM

Fermilab Independent Assessment Report			
Assessment Number & Title: 11-IA-QA-003-BSS Inspection and Acceptance	Version: 1		
Testing & Suspect/Counterfeit Items			

**Date(s) of Assessment:** 10/18/10 – 12/3/10

Performing Organization: Office of Quality and Best Practices

# **Assessed Organization(s):**

Business Services Section, Departments:

- Property and Inventory Control
- Transportation Services
- Procurement
- Fire Department

## **Report content**

This report contains the following sections:

- Assessment Activities & Scope
- Scope Limitations
- Activities Reviewed Within This Assessment
- Description of Implementation & Effectiveness of Observed Activities
- Conclusions
- Findings
- Observations & Recommendations
- Commendable Practices

### **Assessment Activities & Scope:**

Implementation and effectiveness of controls for Inspection & Acceptance Test and Suspect/Counterfeit Items (S/CI) relative to the requirements of Integrated Quality Assurance (IQA), Suspect/Counterfeit Item (S/CI) Program 1006, and Controlling Suspect/Counterfeit Items Procedure 1006.1001, were examined via interview and document & record review. These controls were examined across the BSS departments listed in the "Assessed Organization(s)" section of this report.

## **Scope Limitations:**

The scope of this assessment was limited to those activities or services associated with S/CI and Inspection and Acceptance Testing within Fermilab's Business Services Section. IQA section 8.5 "Control of Measuring and Test Equipment (M&TE)" was not within the scope of this assessment. In order to make the results of the assessment more relevant and useful, the assessment team only looked at Inspection & Acceptance Test and S/CI for items purchased within the last year. Special Material was outside the scope of this assessment.

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## **Activities Reviewed Within this Assessment:**

The following activities were reviewed during this assessment

- Inspection and Acceptance Test Procedures for Purchase Order Items
- Inspection and Acceptance Test Procedures for Procard Order Items
- Control of Nonconforming Items Procedures
- S/CI Coordinator Procedures
- Procedures for Controlling S/CI

# Description of Implementation & Effectiveness of Observed Activities:

# Inspection and Acceptance Testing:

Inspection and Acceptance Testing requirements are compliant and have been implemented within many BSS departments assessed. To ensure quality parts and materials are received, the procurement organization, the property and inventory stockroom, and the fire department make purchases from manufacturers and authorized dealers. They use the GSA de-barred list (File01) to avoid firms that have delivered non-conforming products in the past.

An incoming visual inspection is performed by the property and inventory control stockroom and the fire department to ensure that the correct parts have been received and to ensure that no obvious physical damage is present.

# At the fire department:

- Fire Hose Testing and Loads document FD-RO-207 dated 6/1/10 was examined which contained procedures for testing and operating new fire hoses. The team also observed hose test records 10-001 through 10-010 dated 8/31/10 that contained the test records for 10 recently purchased fire hoses which showed all hoses passed tests.
- Purchase order 591344 for the inspection and test of ladders by Underwriters Laboratories was examined. The team also observed records of the inspection (File 02, File 03) in which all ladders passed the tests.
- Purchase order 595778 for incoming inspection of test gas by CALGAZ was examined. The team
  also observed the certificate from CALGAZ dated 9/27/10 (File 04) that showed the 4 cylinders of
  test gas inspected met specifications.

Vehicle maintenance purchases bolts directly from the manufacturer to ensure genuine, quality parts are received. All conforming bolts have the manufacturer's name stamped on them. In the vehicle maintenance stockroom 2 grade 5 bolts with no manufacturer name stamped on them were observed in the ½" x 2" Lawson bolt bin.

This observation has been documented in the finding below.

# Suspect/Counterfeit Items:

Suspect/Counterfeit Items requirements are compliant and have been effectively implemented within many Business Services Departments assessed. However, because no Suspect/Counterfeit Items have been discovered by BSS personnel during the sampled time interval, the assessment team was not able to fully verify adherence to either Suspect/Counterfeit Item (S/CI) Program, 1006, or Controlling

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Suspect/Counterfeit Items Procedure, 1006.1001, which became effective 3/19/10.

All requestors and Procard holders interviewed were aware of the risks associated with S/CI and the need to purchase from reputable suppliers. Procurement uses authorized dealers, manufacturers, and a debarred list to avoid incoming S/CI. Personnel interviewed were aware of the S/CI reporting process, but because no S/CI has been detected since the procedure became effective (3/19/10), implementation of the reporting process could not be verified by the assessment team.

Nonconforming material that is possibly Suspect/Counterfeit was found in the Vehicle maintenance stockroom as described in the finding below.

## **Conclusions:**

Inspection and Acceptance Testing requirements are compliant and have been implemented within many BSS departments assessed. A variety of methods are used to ensure that genuine, quality items are received including purchasing from manufacturers and authorized dealers, incoming visual inspection and test, and the use of a debarred list. In addition, the fire department utilizes independent, 3rd party testing of critical items such as ladders, and supplier certification of items such as test gas used to check meters. An isolated nonconforming item issue was found and is documented in the finding below.

Suspect/Counterfeit Items requirements are compliant and have been successfully implemented within many Business Services departments assessed. Although BSS personnel interviewed were aware of S/CI procedures, because no Suspect/Counterfeit Items have been discovered by BSS personnel during the sampled time interval, the assessment team was not able to fully verify adherence to either the S/CI program 1006 or procedure 1006.1001 requirements. Possible Suspect Items were discovered in the Vehicle Maintenance stockroom as described in the finding below.

### Finding:

Nonconforming material was found that had not been segregated from good material as required by IQA Chapter 8.

IQA Chapter 8, Inspection and Acceptance Testing section 8.3.1, Control of Nonconforming Items paragraph 1 states "Divisions/sections/centers are responsible for control of nonconforming items. Controls include identification, documentation, evaluation, segregation (when practical), item disposition (reject, repair, rework, use-as-is), and notification to affected organizations." In the Vehicle Maintenance stockroom, 2 bolts without a manufacturer name stamped on them were found in the bolt bins marked "Lawson". Since the bolts were missing the manufacturer name, they are considered nonconforming and should have been segregated as required by the IQA. However, these bolts were found mixed in with conforming bolts that had the manufacturer name stamped on them.

#### **Observations and Recommendations:**

1. Observation: Fire department personnel believe that material received from the property and inventory control stockroom has been inspected to ensure it is free from defects and is not Suspect/Counterfeit. However, some material received into the property and inventory control stockroom receives only a visual inspection for correct part number and obvious damage; not all material is inspected to ensure it is not Suspect/Counterfeit.

**Recommendation:** Communicate the type of inspection and test the property and inventory

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control stockroom does on incoming material.

**2. Observation:** There are no records of S/CI training for 5/11 interviewees including 1 person responsible for specifying and ordering items.

**Recommendation:** Review the requirements for determining who should take the S/CI training to ensure that all those requiring the training receive it.

## **Commendable Practice:**

1. In the property and inventory control stockroom, the bins containing Square D circuit breakers also contain HSS Safety bulletins that describe how to detect Suspect/Counterfeit Square D breakers. Although not a required activity by the Site 38 Stockroom, these bulletins are delivered along with the breakers to requestors.

### Titles and Names of Person Interviewed:

- Frank Cesarano
- Joe Collins
- George Davidson
- Teolia Jordan
- Jack Kelly
- Larry Meyer
- Greg Mitchell
- Joe Morgan
- Brian Niesman
- Tom Smith
- Jack Steinhoff

## **Documents Reviewed:**

- Disposal & destruction of Suspect/Counterfeit Items Draft 10/10/10
- Disposal Criteria Draft /10/9/10
- Letter RE: Item Descriptions "Or equal" from Joe Collins 7/17/09
- Policy on acquiring goods and services from manufacturers or their authorized distributors 10/19/09
- Procurement Approval Form rev. April 2010
- Representations, Certifications, & Acknowledgments FL-6 Rev.7/08
- Representations, Certifications, & Acknowledgments Commercial Items FL-201 Rev.7/08
- Purchase Order 595246, Fujifilm Ultrium LTO5 and Ultrium 5 tape media
- Purchase Order 595240, Maxell Max 229323 LTO5 tape media
- Purchase Order 596552, Fujifim Ultrium IV tape media
- Purchase Order 595525, LTO5-IB8FC Sun Storage Tek IBM LTO5 8GB drive
- Purchase Order 591344, inspection of ladders by UL
- Purchase Order 595778, CALGAZ test gas
- Purchase Order 594847, Hurst emergency cutters
- Purchase Order PRN137435, Foot Switch

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- Purchase Order PRN137253, Gas filter replacement
- Purchase Order PRN136572, Flodatank 1000 gallon portable tank
- Basic Ordering Agreement between Brookhaven and Burle Industries for purchase or remanufacture (repair) of high power RF power tubes
- Training completed report S/CI Program 7/21/07 10/19/10Training completed report S/CI Item identification 7/21/07 10/19/10
- Training completed report S/CI Identification and Program 7/21/07 10/19/10
- Basic Receiving Operation (online)
- Fermilab Procurement Policy and Procedures Manual 12/22/2003
- Fermilab Procurement Card (ProCard) User's Guide January 2008
- Fermilab Subcontract General Provisions F1-1 rev.12/09
- Receiving of Equipment or material, FD-ADM-104, rev. 4, 6/1/10
- Fire Hose Testing and Loads, FD-RO-207, 6/1/10
- Certificate of Inspection of In-Service Fire Department Ground Ladders, 3/22/10 (certificate 10FES6924)

# **Requirements Applied:**

The specific criteria applied to this assessment were:

Fermilab Integrated Quality Assurance (IQA), Document 1001

Chapter 8 – Inspection and Acceptance Testing

Chapter 10 – Suspect/Counterfeit Items

Suspect/Counterfeit Item (S/CI) Program, 1006,

Controlling Suspect/Counterfeit Items Procedure, 1006.1001

# Describe or List Any Other Assessment Methods Used: None

# **Corrective Action Plans Issued:**

BSS-20101203-01: Nonconforming material was found that had not been segregated from good material as required by IQA Chapter 8.

# Assessors' Names (asterisk indicates team leader):

Bakul Banerjee Tom Gehrke John Martzel\*

Submitted by: John Martzel Date: 12/3/10

# **Distribution:**

D. Carlson
J. Grant
J. Irvin
J. Cotton
F. Cesarano
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G. Mitchell
B. Banerjee
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# **Attachments:**

File 01: GSA Debarred list

File 02: Records of UL inspection of ladders
File 03: UL certificate of ladders passing inspection
File 04: CALGAZ certificate of test gas passing inspection